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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/035,995 | 03/06/1998 | TAKESHI SAITO | 0039-6551-3R | 5430 |

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EXAMINER

WILLETT, STEPHAN F

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2152

DATE MAILED: 08/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

OK

Office Action Summary

Application No.
09/035,995

Applicant(s)
Saito et al.

Examiner
Stephan Willett

Art Unit
2152



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 11, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20, 24-29, 37, 38, and 93-95 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20, 24-29, 37, 38, and 93-95 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20, 24-27, 29, 37-38,93-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al. with Patent Number 5,623,605 in view of Eisenhandler with Patent Number 5,452,291.

4. Regarding claim(s) 20, 93-95, Keshav teaches an establishing unit to configure a connection in the LAN, col. 6, lines 12-15, and as "Fig. 6 illustrates a client connection routine which may be used by a processing system to obtain a virtual circuit with a desired remote connection-oriented server program", col. 10, lines 26-29 and "after receiving the acknowledgment from the connection manager, the routine then waits, for a subsequent message from the connection

manager that a connection with the requested remote server program has been established", col. 10, lines 49-53. Keshav teaches a second establishing unit to configure a connection between the WAN, col. 6, lines 31-39. Keshav teaches a conversion unit to convert data formats, col. 12, lines 7-13, col. 13, lines 27-28 and "the ATM protocol stack interface may perform data transfer of ATM-formatted frames between application program and a device on the ATM network via the ATM network interface, or a device on the Internet protocol stack interface and the stack interfaces and the encapsulator decapsulator may operate as a gateway processing system or ATM-enabled host on the Internet for transferring data between devices on the networks" (col. 6, lines 49-58. Keshav teaches a commanding unit configured to command the transmitting node to transmit the information data through the first connection, by using a protocol of the LAN as "within the processing system, the exemplary application program, which may be a connection less server or client program, communicates with a connection service routines library and communications may occur by interprocess communication within the processing unit, or by a connection between two suitably programmed circuits or devices within the processing system", col. 5, lines 58-64 and col. 5-6, lines 66-4. The Keshav et al. patent does not explicitly disclose transmitting audio/visual data. In that Keshav operates to convert data formats, the artisan would have looked to the data conversion arts for details of implementing conversion between networks and connection establishment. In that art, Eisenhandler, a related network data converter, teaches "that similar processes (e.g., application, network layer and data link layer) are executed in each of the CNI's in BCC", col. 10, lines 17-19 in order to provide the required data conversion. Eisenhandler specifically teaches "the router function is effective for transferring packets between the wireless medium and the wired medium, between the wireless medium and the

devices, and between the wired medium and the devices", col. 4, lines 64-68 with audio visual data, col 2, lines 50-63. It would have been obvious to one of ordinary skill in the art to incorporate the use of audio visual data in the interfaced network in the Eisenhandler patent since the system interface two different physical network systems similar to the protocol conversions in Keshav. To incorporate audio visual data dependent on other protocols would insure that other data formats are supported by the system in an effective manner. The motivation for incorporating audio visual data results in the ability to interface two different physical networks audio visual data. Therefore, by the above rational, the above claims are rejected.

5. Regarding claims 24-25, 38, the Keshav et al. patent discloses the apparatus of claim 20. The Keshav et al. patent does not explicitly disclose a collecting unit for collecting attribute information of transmitting and/or receiving nodes and a notifying unit for notifying said attribute information to said another data transfer control device and/or receiving node and a receiving unit for receiving a notice regarding attribute information of transmitting and/or receiving nodes; and a memory unit for storing said attribute information. However, Official Notice is taken (see MPEP 2144.03 (a)) that collecting information regarding network nodes and storing such network node attribute information is well known in the art to insure that two different networks are able to communicate. It would have been obvious to one of ordinary skill in the art at the time of the application's invention to determine the network topology to obtain the advantages of communicating with different network protocols and systems. By the above rational, claims 9 and 10 are rejected.

6. Regarding claim(s) 26-27, Keshav teaches a message designating an address to sent data, col. 6, lines 43-44.

7. Regarding claim(s) 29, 37, Keshav teaches encoding and decoding of data as "the generated IP packet header is then appended [encoded] to the generated intermediate data packet to form the IP packet", col. 12, lines 43-44, "the ATM protocol stack interface arranges data into an ATM-formatted frame and transmits it to the encapsulator-decapsulator which encapsulates the data packet within an IP packet", col. 7, lines 49-53 and "if the IP format packet indicates the packet contains an encapsulated ATM-formatted frame, as in this example, then IP packet is sent to the encapsulator-decapsulator for decapsulation", col. 12, lines 54-58..

8. Claims 28, 29, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al. with Patent Number 5,623,605 in view of Ogawa et al. with Patent Number 5,608,874.

9. Regarding claim(s) 28, Keshav teaches an establishing unit to configure a connection in the LAN, col. 6, lines 12-15, and as "Fig. 6 illustrates a client connection routine which may be used by a processing system to obtain a virtual circuit with a desired remote connection-oriented server program", col. 10, lines 26-29 and "after receiving the acknowledgment from the connection manager, the routine then waits, for a subsequent message from the connection manager that a connection with the requested remote server program has been established", col. 10, lines 49-53. Keshav teaches a second establishing unit to configure a connection between the WAN, col. 6, lines 31-39. Keshav teaches a conversion unit to convert data formats, col. 12, lines 7-13, and col. 13, lines 27-28. Keshav teaches a commanding unit configured to command the transmitting node to transmit the information data through the first connection, by using a protocol of the LAN as "within the processing system, the exemplary application program, which may be a connection less server or client program, communicates with a connection service routines library and communications may occur by interprocess communication within the

processing unit, or by a connection between two suitably programmed circuits or devices within the processing system", col. 5, lines 58-64 and col. 5-6, lines 66-4. The Keshav et al. patent does not explicitly disclose transmitting audio/visual data and converting payload data. In that Keshav operates to convert data formats, the artisan would have looked to the data conversion arts for details of implementing conversion between networks and connection establishment. In that art, Ogawa, a related network data converter, teaches "a set of data that a Provider Section sends to Main Processing Section is called Provider Data File", col. 8, lines 51-53 in order to provide the required data content. Ogawa specifically teaches "once it has been determined which particular PreProcessor is needed to translate from the particular Provider Data Format of the Provider Data File", col. 15, lines 8-10. Further, Ogawa suggests "other known means for accomplishing file format translation", col. 16, line 38-39 can be accommodated to achieve differing formats. The motivation to incorporate payload data insures that expected data in a network system can be processed. Thus, it would have been obvious to one of ordinary skill in the art to incorporate payload data as taught in Ogawa into the network conversion system described in the Keshav patent because Keshav operates with network communications and Ogawa suggests that optimization can be obtained with audio visual data. Therefore, by the above rational, the above claim(s) are rejected.

10. Regarding claim(s) 29, 37, Ogawa teaches encoding and decoding of data, col. 6, lines 29-30.

11. Claims 20, 24-25, 93-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al. with Patent Number 5,623,605 in view of Kremen et al. with Patent Number 5,706,434.

12. Regarding claim(s) 20, 93-95, Keshav teaches an establishing unit to configure a connection in the LAN, col. 6, lines 12-15, and as "Fig. 6 illustrates a client connection routine which may be used by a processing system to obtain a virtual circuit with a desired remote connection-oriented server program", col. 10, lines 26-29 and "after receiving the acknowledgment from the connection manager, the routine then waits, for a subsequent message from the connection manager that a connection with the requested remote server program has been established", col. 10, lines 49-53. Keshav teaches a second establishing unit to configure a connection between the WAN, col. 6, lines 31-39. Keshav teaches a conversion unit to convert data formats, col. 12, lines 7-13, and col. 13, lines 27-28. Keshav teaches a commanding unit configured to command the transmitting node to transmit the information data through the first connection, by using a protocol of the LAN as "within the processing system, the exemplary application program, which may be a connection less server or client program, communicates with a connection service routines library and communications may occur by interprocess communication within the processing unit, or by a connection between two suitably programmed circuits or devices within the processing system", col. 5, lines 58-64 and col. 5-6, lines 66-4. The Keshav et al. patent does not explicitly disclose transmitting audio/visual data. In that Keshav operates to convert data formats, the artisan would have looked to the data conversion arts for details of implementing conversion between networks and connection establishment. In that art, Kremen, a related network data converter, teaches "an object is defined herein as a collection of data", col. 6, line 48 in order to provide the required data content. Kremen specifically teaches "an object may be an image, audio, video, text or a document", col. 6, lines 49-51. Further, Kremen suggests that "a plurality of protocols", col. 6, line 67 can be accommodated. The motivation to incorporate audio

visual data insures that expected data in a network system can be processed. Thus, it would have been obvious to one of ordinary skill in the art to incorporate audio visual data as taught in Kremen into the network conversion system described in the Keshav patent because Keshav operates with network communications and Kremen suggests that optimization can be obtained with audio visual data. Therefore, by the above rational, the above claim(s) are rejected.

13. Regarding claims 24, 38, Kremen teaches collecting attributes of nodes on a network, col. 7, lines 21-25. Kremen teaches notifying an intermediate node of sending nodes and receiving nodes attributes, col. 9, lines 27-30. Therefore, by the above rational, the above claim(s) are rejected.

14. Regarding claims 25, Kremen teaches storing said attribute information, col. 7, lines 25-27. Therefore, by the above rational, the above claim(s) are rejected.

Conclusion

15. A close review of the Pham, Bird, Kulkarni, Britton, Pettus and Cullen references with Patent Numbers 5,524,253; 5,224,098; 5,862,481; 5,491,693; 5,515,508; and 5,920,565, respectively, is suggested. The other references cited teach numerous other ways to perform data conversion, thus a close review of them is suggested.

16. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

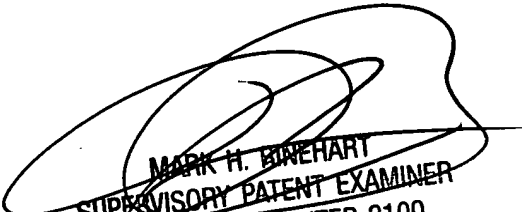
17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-6606.

19. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9605.

sfw

July 24, 2002



MARK H. RINEHART
SUPERVISORY PATENT EXAMINER
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